

What is claimed is:

1. An article comprising a thermally associated nondeleterious contaminated metal non-oxide coated three dimensional powder particle substrate having an inner polymer substrate core and a metal non-oxide coating thermally associated with at least a part of the external surface of said inner core without substantially adversely effecting the solid integrity of the substrate, said metal and non-oxide being chemically different.

2. The article of Claim 1 wherein the metal of the metal non-oxide coating is selected from the group consisting of iron, titanium, boron, silicon, aluminum, molybdenum, zirconium, tungsten, nickel and mixtures thereof.

3. The article of Claim 2 wherein the metal is selected from the group consisting of titanium, boron, aluminum and silicon and the polymer core is a poly imide.

4. The article of Claim 1 wherein the non-oxide of the metal non-oxide coating is selected from the group consisting of carbide, boride, sulfide, silicide, and nitride.

5. The article of Claim 4 wherein the non-oxide is selected from the group consisting of nitride, boride, carbide and the polymer core is a poly imide.

6. The article of Claim 2 wherein the metal non-oxide coating is selected from the group consisting of metal carbide, metal boride and metal nitride.

7. The article of Claim 3 wherein the metal non-oxide coating is selected from the group consisting of metal nitride, metal carbide and metal nitride.

8. An article comprising a thermally associated nondeleterious contaminated metal carbide coated three dimensional powder particle substrate having an inner polymer substrate core and a metal carbide coating thermally

associated with at least a part of the external surface of said inner core without substantially adversely effecting the solid integrity of the substrate, said metal and non-oxide being chemically different.

9. The article of Claim 8 wherein the metal of the metal carbide coating is selected from the group consisting of iron, titanium, boron, silicon, aluminum, molybdenum, zirconium, tungsten, nickel and mixtures thereof.

10. The article of Claim 9 wherein the metal is selected from the group consisting of titanium, boron, aluminum, silicon and the polymer core is a poly imide.

11. The article of Claim 8 wherein the metal carbide coating is selected from the group consisting of silicon carbide, titanium carbide, boron carbide and zirconium carbide.

12. The article of Claim 11 wherein the metal carbide coating is selected from the group consisting of silicon carbide and titanium carbide.

13. The article of Claim 12 wherein the metal carbide coating is silicon carbide.

14. An article comprising a thermally associated nondeleterious contaminated metal nitride coated three dimensional powder particle substrate having an inner polymer substrate core and a metal nitride coating thermally associated with at least a part of the external surface of said inner core without substantially adversely effecting the solid integrity of the substrate, said metal and non-oxide being chemically different.

15. The article of Claim 13 wherein the metal of the metal nitride coating is selected from the group consisting of iron, titanium, boron, silicon, aluminum, molybdenum, zirconium, tungsten, nickel and mixtures thereof.

16. The article of Claim 14 wherein the metal is selected from the group consisting of titanium, boron,

aluminum and silicon and the polymer core is a poly imide.

17. The article of Claim 13 wherein the metal nitride coating is selected from the group consisting of aluminum nitride, silicon nitride, boron nitride and titanium nitride.

18. The article of Claim 16 wherein the metal nitride coating is aluminum nitride.

19. The article of Claim 16 wherein the metal nitride coating is boron nitride.

20. The article of Claim 16 wherein the metal nitride coating is silicon nitride.